9-63 EDITIONS MFG. 9-63

CLASSIFIED MESSAGE

SECRET

DATE 1835Z 19 NOV 63

ROUTING

1		9	
2		10	
3		11	
4		12	
5		13	
6		14	
7		15	
8		16	

TO : DIRECTOR

FROM : 25X1

ACTION: OSA (1-15)

INFO :

TOR 1935Z 19 NOV 63

ACTION

ROUTINE

Info	Act	Init.
	CHIEF	
	IE	
	OXCART	
✓	IDEALIST	
	SUPPLY	

IN 51167

25X1

25X1

TO 25X1 INFO CITE 0741

SUBJECT: CHANGE PROPOSALS LAC-160 AND 161

1. BOTH PROPOSALS ARE APPROVED BY THE FOG SPO WITH THE FOLLOWING CONSIDERATIONS:

A. THE FLIGHT TEST EVALUATION OF THE COMPETING AUTOPILOT SYST IS TO BE ACCOMPLISHED WITHOUT THE IMPROVED NAVIGATION CAPABILITY (LAC-160) INSTALLED. THIS IS IN ORDER TO AVOID POSSIBLE INFLUENCE OF NAVIGATION CONVENIENCE ON AUTOPILOT SUBJECTIVE EVALUATION.

B. A MINIMUM OF ONE AFSC AND ONE SAC PILOT WILL BE REQUIRED TO FLY THE TEST INSTALLATIONS FOR EVALUATIONS. SUGGEST THIS EFFORT BE DONE OUT AT EDWARDS.

C. THE NAVIGATION IMPROVEMENT SHOULD BE INSTALLED AFTER THE AUTOPILOT EVALUATION HAS BEEN COMPLETED AND FLOWN BY TWO SAC PILOTS ON SIMULATED MISSION PROFILES.

-END OF MSG-

SECRET

GROUP 1
Excluded from automatic downgrading and declassification

LOCKHEED AIRCRAFT CORPORATION	ENGINEERING STUDY [X] CHANGE PROPOSAL [ ]	LAC -161
DATE 5 NOVEMBER 1963	AFFECTS: WSPO [X]	PROJECT [X]

NAME OF MAJOR COMPONENT	PART OR LOWEST SUBASSEMBLY	PART NO. & MODEL OR TYPE

TITLE OF PROPOSAL : AUTOMATIC FLIGHT CONTROL SYSTEM AND FLIGHT REFERENCE SYSTEM - FLIGHT TEST EVALUATION

NATURE OF PROPOSAL :

SEE PAGE 2

REASON FOR PROPOSAL :

SEE PAGE 2

ES	ESTIMATED COST AND TIME INVOLVED :	
	ADDITIONAL FUNDING REQUIRED :	
CP	ESTIMATED COST FOR KITS OR PARTS :	SEE PAGES 3 & 4
	ADDITIONAL FUNDING REQUIRED :	NONE SP-1923

ITEMS AFFECTED BY PROPOSAL :

SAFETY	MISSION EFFEC-TIVENESS	PERFORM-ANCE	OPERATING PROCEDURE	INTER-CHANGE-ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTE-NANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTE-NANCE MANUAL
[X]	[X]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD

SOURCE OF PARTS FOR KIT	AVAILABILITY ___ WEEKS AFTER APPROVAL
LAC	SEE PAGES 3 & 4

DISPOSITION OF SPARES AFFECTED
NA

25X1

I Concur [signature] OD/6SA 15 NOV 63

INITIATED BY :	APPROVED : ~~WSPO~~ PROJ
CONTRACTOR	15 Nov 63

SP-E-1A

REASON FOR PROPOSAL:

To evaluate and compare performance and reliability of two combination automatic flight control (autopilot) and flight reference systems with improved system functions, improved control features, and improved pilot operation.

NATURE OF PROPOSAL:

Part A

Install, in breadboard form, a prototype LSI proposed AFCS and flight reference system.

The AFCS will be similar to one currently used in the Gyrodyne and Q2C Drone systems using proven electronics circuits and will utilize existing ships AFCS components where practical.

The flight reference system will be LSI 2 gyro platform type AF/A24G-1A.

An improved course indicator will be installed in place of the ID-250.

Part B

Upon completion of flight test of Part A, the LSI system will be removed and a prototype Minneapolis Honeywell AFC system will be installed in breadboard manner along with a Bendix 2 gyro platform flight reference system.

The AFCS (M-H) will adapt and modify an autopilot electronics system originally designed and packaged for the F-104J aircraft. It will include an air data computer which will be a sub-system designed and packaged for another program and modified to provide true air speed information to the new navigation system (see ECP LAC-160).

The flight reference system will be an A/A24G-5 including 2 gyro Bendix platform, AN/AJN/3A servo amplifier, AN/AJN-3 compass control panel, flux valve, and rate switch.

An improved course indicator will be installed in place of the ID-250.

Next 1 Page(s) In Document Exempt

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